Application No.: 09/662,392

REMARKS/ARGUMENTS

The Office Action mailed November 4, 2002 in the parent application has been carefully reviewed. Consideration of this RCE Application, as amended, and in view of the following remarks, is respectfully requested. Claims 1 – 18 are present for consideration.

Objection to Claim 16

In numbered paragraph 2 of the Office Action mailed November 4, 2002 claim 16 was "objected to." The Examiner pointed our that the word "precipitation" should be "precipitator." Applicant has amended claim 16 to change the word "precipitation" to "precipitator."

Rejection of Claim 1 under 35 U.S.C. 102(e)

In numbered paragraph 4 of the Office Action mailed November 4, 2002 claim 1 was rejected under 35 U.S.C. 102(e) as being anticipated by Pearman.

Claim 1 has been amended. Twice amended claim 1 now provides, "a detection system for detecting said chemical weapons and/or biological pathogens agents, a treatment system for treating said chemical weapons and/or biological pathogens agents by treating said air inside of said enclosed airspace, and a control, responsive to said detection system, for activating said treatment system in response to detection of said chemical weapons and/or biological pathogens agents, said treatment system treating said air inside of said enclosed airspace."

The Pearman reference does not show the elements of twice amended claim 1. As stated in <u>Verdegaal Bros. v. Union Oil Co. of California</u>, 814 F.2nd 628, 631 USPQ 1051, 1053 (Fed. Cir. 1987), "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference." Since the steps of twice amended claim

1, described above, are not shown by Pearman the rejection is unsupported by the art and should be withdrawn.

Rejection of Claims 7 and 9-11 under 35 U.S.C. 103(a)

In numbered paragraph 7 of the Office Action mailed November 4, 2002 claims 7 and 9-11 were rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Moscolo et al. in view of Pearman. Independent claims 7 and 9 have been amended. Twice amended claims 7 and 9 now provide:

"circulating said air within said air stream, detecting said chemical weapons and/or biological pathogens agents, generating a signal upon detection of said chemical weapons and/or biological pathogens agents, and using said signal to activate a treatment system connected to said air stream for treating said chemical weapons and/or biological pathogens agents, said treatment system treating said air within said air stream."

(Twice Amended Claim 7)

"an autonomous chemical and pathogen detector within the said forcedair circulation system that detects the presence of airborne chemical weapons and/or biological pathogens threats, a treatment system for treating said chemical weapons and/or biological pathogens threats, <u>said</u> <u>treatment system treating said air stream</u>, and a control, responsive to said autonomous chemical and pathogen detector, for activating said treatment system in response to detection of said chemical weapons and/or biological pathogens agents." (Twice Amended Claim 9)

Applicant respectfully traverses the rejection of claims 7 and 9-11 under 35 U.S.C. §103(a). Under MPEP §2142, there are three requirements to establish a prima facie case of obviousness. (1) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. (2) There must be a reasonable expectation of success. (3) The prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

There is no suggestion or motivation in the prior art to combine the references. The primary reference, the Moscolo et al. reference, states, "By 'treatment' is meant supplying deodorizing or air freshening chemicals, particular scents, and in some cases, chemicals for air cleaning such as fungicides, mildewicides or the like." The Moscolo et al. reference system is for "deodorizing or air freshening chemicals, particular scents, and in some cases, chemicals for air cleaning such as fungicides, mildewicides or the like." There is a significant difference between the Moscolo et al. reference system "chemicals for air cleaning such as fungicides, mildewicides" and Applicant's claimed steps of "treating chemical weapons and/or biological pathogens threats" which are sometimes called "weapons of mass destruction."

The secondary reference, the Pearman reference, states, "a system for decontaminating persons in a building using at least one sprinkler head or wash station connected to a source of water or other gaseous or liquid decontamination fluid." The Pearman reference system decontaminates persons using a sprinkler head or wash station with nozzles to spray a decontamination fluid onto the persons and does not show or suggest Applicant's claimed steps of "treating said air within said air stream."

The Moscolo et al. reference and the Pearman reference are not combinable under 35 U.S.C. 103(a) to render the invention defined by amended claims 7 and 9-11 unpatentable. In addition to lacking a "teaching, suggestion, or motivation" for combining the Moscolo et al. and the Pearman systems, the

combination would not provide the invention defined by claims 7, and 9-11. The use of the Pearman "sprinkler head or wash station" in the Moscolo et al. system that uses "deodorizing or air freshening chemicals, particular scents, and in some cases, chemicals for air cleaning such as fungicides, mildewicides or the like" would not provide the invention defined by claims 7, and 9-11 nor would there be any expectation of success with such a combination.

Rejection of Claims 2, 3, 5, 6, 8, 12, 13, and 15 under 35 U.S.C. 103(a)

In numbered paragraph 8 of the Office Action mailed November 4, 2002 claims 2, 3, 5, 6, 8, 12, 13, and 15 were rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Moscolo et al. in view of Pearman as applied to claims 7, 9-11 and also over Pearman as applied to claim 1 above, and further in view of Groger et al.

Applicant respectfully traverses the rejection of claims 2, 3, 5, 6, 8, 12, 13, and 15. Applicant incorporates the above responses to the rejection of claim 1 and the rejection of claims 7, 9-11 in this response to the rejection of claims 2, 3, 5, 6, 8, 12, 13, and 15.

There is no suggestion or motivation in the prior art to combine the Moscolo et al., Pearman, and Groger et al. references nor would there be any expectation of success with such a combination. The use of the Groger et al. sensor that includes "a surface-sensitive diode laser having a substrate layer, an n-contact layer positioned on a bottom surface of the substrate, an n-clad layer overlying the top surface of the substrate, a first guide layer overlying the n-clad layer, a quantum well layer overlying the first guide layer, a second guide layer overlying the first quantum well layer, a p-clad layer overlying the second guided layer and a p-doped cap layer overlying the p-clad layer" in the Pearman "sprinkler head or wash station" in the Moscolo et al. system that uses "deodorizing or air freshening chemicals, particular scents, and in some cases,

chemicals for air cleaning such as fungicides, mildewicides or the like" would not provide the invention defined by claims 2, 3, 5, 6, 8, 12, 13, and 15 nor would there be any expectation of success with such a combination.

Rejection of Claims 4 and 14 under 35 U.S.C. 103(a)

In numbered paragraph 9 of the Office Action mailed November 4, 2002 claims 4 and 14 were rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Moscolo et al. in view of Pearman as applied to claim 11 and also over Pearman as applied to claim 1 above, and further in view of Anbar et al.

Applicant respectfully traverses the rejection of claims 4 and 14. Applicant incorporates the above responses to the rejections of claim 1 and 11 in this response to the rejection of claims 4 and 14.

There is no suggestion or motivation in the prior art to combine the Moscolo et al., Pearman, and Anbar et al. references nor would there be any expectation of success with such a combination. The use of the Anbar et al. "system of making an immunological assay whereby stable isotopes of certain elements, or long-lived radioisotopes of these elements are used to tag antigens or antibodies" in the Pearman "sprinkler head or wash station" in the Moscolo et al. system that uses "deodorizing or air freshening chemicals, particular scents, and in some cases, chemicals for air cleaning such as fungicides, mildewicides or the like" would not provide the invention defined by claims 4 and 14 nor would there be any expectation of success with such a combination.

Rejection of Claims 16-18 under 35 U.S.C. 103(a)

In numbered paragraph 10 of the Office Action mailed November 4, 2002 claims 16-18 were rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Moscolo et al. in view of Pearman as applied to claim 11 and further in view of Conduit et al.

Applicant respectfully traverses the rejection of claims 16-18. Applicant incorporates the above responses to the rejection of claim 11 in this response to the rejection of claims 16-18.

There is no suggestion or motivation in the prior art to combine the Moscolo et al., Pearman, and Conduit et al. references nor would there be any expectation of success with such a combination. The use of the Conduit et al. "air cleansing apparatus that includes an electrostatic precipitator in which the collector plates are made of, for instance, reticulated chemical vapor deposited silicon carbide, or reticulated silicon carbide ceramic coated with titanium nitride, zirconium diboride, or chemical vapor deposited silicon carbide" in the Pearman "sprinkler head or wash station" in the Moscolo et al. system that uses "deodorizing or air freshening chemicals, particular scents, and in some cases, chemicals for air cleaning such as fungicides, mildewicides or the like" would not provide the invention defined by claims 16-18 nor would there be any expectation of success with such a combination.

Rejection of Claims 2-5 and 12-15 under 35 U.S.C. 103(a)

In numbered paragraph 11 of the Office Action mailed November 4, 2002 claims 2-5 and 12-15 were rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Moscolo et al. in view of Pearman as applied to claims 7, 9-11 and also over Pearman as applied to claim 1 above, and further in view of Belgrader et al.

Applicant respectfully traverses the rejection of claims 2-5 and 12-15.

Applicant incorporates the above responses to the rejections of claim 1 and 11 in this response to the rejection of claims 2-5 and 12-15.

There is no suggestion or motivation in the prior art to combine the Moscolo et al., Pearman, and Belgrader et al. references nor would there be any expectation of success with such a combination. The use of the Belgrader et al.

"prototype" in the Pearman "sprinkler head or wash station" in the Moscolo et al. system that uses "deodorizing or air freshening chemicals, particular scents, and in some cases, chemicals for air cleaning such as fungicides, mildewicides or the like" would not provide the invention defined by claims 2-5 and 12-15 nor would there be any expectation of success with such a combination.

SUMMARY

The undersigned respectfully submits that, in view of the foregoing amendments and remarks the rejections of the claims raised in the Office Action mailed November 4, 2002 in the parent application have been fully addressed and overcome. The present RCE Application is believed to be in condition for allowance. It is respectfully requested that this application be reconsidered, that claims 1 – 18 be allowed, and that this case be passed to issue. If it is believed that a telephone conversation would expedite the prosecution of the present application, or clarify matters with regard to its allowance, the Examiner is invited to call the undersigned attorney at (925) 424-6897.

Respectfully submitted,

Eddie E. Scott

Assistant Laboratory Counsel

University of California

Lawrence Livermore National Laboratory

Attorney for Applicant

Registration No. 25,220

Tel. No. (925) 424-6897

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

1. (Twice Amended) A system for protecting an enclosure against chemical weapons and/or biological pathogens by the detection of said chemical weapons and/or biological pathogens and the treatment of said chemical weapons and/or biological pathogens agents within air inside of an enclosed airspace that is a gathering area for people, comprising:

a detection system for detecting said chemical weapons and/or biological pathogens agents [within said air],

a treatment system for treating said chemical weapons and/or biological pathogens agents by treating said air inside of said enclosed airspace, and

a control, responsive to said detection system, for activating said treatment system in response to detection of said chemical weapons and/or biological pathogens agents, said treatment system treating [within] said air inside of said enclosed airspace.

7. (Twice Amended) A method for protecting an enclosure against chemical weapons and/or biological pathogens by the detection of said chemical weapons and/or biological pathogens and by the treatment of said chemical weapons and/or biological pathogens agents within the air inside of an enclosed airspace that is a gathering area for people, the air circulated in an air stream, comprising:

circulating said air within said air stream,
detecting said chemical weapons and/or biological pathogens agents,

generating a signal upon detection of said chemical weapons and/or biological pathogens agents, and

using said signal to activate a treatment system connected to said air stream for treating said chemical weapons and/ or biological pathogens agents, said treatment system treating said air within said air stream.

9. (Twice Amended) An apparatus that detects the presence of airborne chemical weapons and/or biological pathogens threats to the human occupants of an enclosed airspace that is served by a forced-air circulation system and treats said chemical weapons and/or biological pathogens threats, said forced-air circulation system circulating an air stream, comprising:

an autonomous chemical and pathogen detector within the said forced-air circulation system that detects the presence of airborne chemical weapons and/or biological pathogens threats,

a treatment system for treating said chemical weapons and/ or biological pathogens threats, <u>said treatment system treating said air stream</u>, and

a control, responsive to said autonomous chemical and pathogen detector, for activating said treatment system in response to detection of said chemical weapons and/or biological pathogens agents.

10. (Twice Amended) An apparatus that detects and identifies the presence of airborne chemical and/or biological threats to the human occupants of an enclosed airspace that is served by a forced-air circulation system, said forced-air circulation system circulating an air stream, comprising:

an autonomous chemical and/or pathogen detector means within the said forced-air circulation system for detecting, identifying, and quantifying the presence of airborne chemical weapons and/or biological pathogens threats,

treatment means for treating said chemical weapons and/or biological pathogens threats, <u>said treatment system treating said air stream</u>, and

control means, responsive to said autonomous chemical and pathogen detector means, for activating said treatment means in response to detection of said chemical weapons and/or biological pathogens agents.

11. (Twice Amended) An apparatus that detects, identifies, and quantifies the presence of airborne chemical weapons and/or biological pathogens threats to the human occupants of an enclosed airspace that is served by a forced-air circulation system and treats said airborne chemical weapons and/or biological pathogens threats, said forced-air circulation system circulating an air stream, comprising:

an autonomous chemical and/or pathogen detector within the said forcedair circulation system that detects, identifies, and quantifies the presence of airborne chemical weapons and/or biological pathogens threats,

a treatment system for treating said chemical weapons and/or biological pathogens threats, said treatment system treating said air stream, and

a control, responsive to said autonomous chemical and/or pathogen detector, for activating said treatment system in response to detection of said chemical weapons and/or biological pathogens agents.

16. (Twice Amended) The apparatus of claim 11 wherein said treatment system utilizes an electrostatic [precipitation] <u>precipitator</u>.